MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2017/2018

DBM5028 – BUSINESS FINANCE

(All sections / Groups)

6 JUNE 2018
2.30 p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **10** pages with 2 sections.
2. Answer all questions.
3. For Section A, shade your answers on the OMR sheet provided.
4. For Section B, write your answers in the answer booklet provided.
5. The formula tables are given in the appendix.

SECTION A: MULTIPLE CHOICE QUESTIONS (40 marks)

Instruction: Please shade your answers on the OMR sheet provided.

1. Recently, Anatasia accepted a job offer as an insurance agent for an agency in Kedah. Her job falls into which one of the following areas of finance?

   A. Corporate finance.
   B. Financial institutions.
   C. International finance.
   D. Investments.

2. The following decisions are related to working capital management except _____.

   A. determining how much cash to keep on hand
   B. determining how much credit to be granted to customers
   C. determining when to pay the suppliers every month
   D. determining whether to purchase a new machine or fix a current machine

3. Barry has been working in Syarikat Cendana for the past three years. He oversees the company's financial accounting, costing, as well as tax matters. Barry reports to the Chief Financial Officer (CFO) as a _____.

   A. controller
   B. investor
   C. shareholder
   D. treasurer

4. Which one of the following statements describes the characteristic of a sole proprietorship?

   A. Obtaining additional equity is easy.
   B. The business entity is difficult to establish due to many regulations.
   C. The owner only takes the profits but do not have to bear the losses.
   D. The ownership cannot be easily transferred to another individual.

5. Which one of the following situations is most appropriate to create an agency conflict?

   A. Compensating a manager based on his or her division's net income.
   B. Giving all employees a bonus if a certain level of efficiency is maintained.
   C. Rejecting a profitable project to protect employees' jobs.
   D. Selling off an underperforming segment of the firm.

Continued...

6. _____ summarises a firm's performance over a certain period of time by listing all its revenues and expenses for that period.

A. Balance sheet
B. Cash flow statement
C. Income statement
D. Owner's equity statement

7. All else equal, an increase in _____ will decrease owners' equity.

A. accounts receivable
B. equipment and machinery
C. inventory
D. long-term debt

8. Which one of the following will increase the liquidity level of a firm?

A. Collection of an account receivable.
B. Payment of amount owing to suppliers.
C. Purchase of inventory by cash.
D. Settlement of bank loan.

9. Harmoni Woodwork's balance sheet reported cash of RM31,100 and accounts receivable of RM49,200. The inventory costs RM86,700 and can be sold today for RM134,200. The fixed assets were purchased at a cost of RM227,600, of which RM77,000 has been depreciated. The fixed assets can be sold today for RM160,000. What is the total book value of the firm's assets?

A. RM167,000
B. RM215,400
C. RM307,000
D. RM317,600

10. Referring to the tax table below, calculate the firm's tax liability if Ismela Manufacturing earns taxable income of RM55,000.

Taxable income		**Tax Rate**
RM	**RM**	
0	50,000	15%
50,001	75,000	25%
75,001	100,000	34%

A. RM8,250
B. RM8,750
C. RM13,750
D. RM26,250

Continued...

11. Simple interest is based on the concept of receiving interest _____.

A. on a monthly basis rather than yearly basis
B. on the first year only
C. on the principal amount and all previous interests
D. on the principal amount originally invested only

12. To compute the future value of a cash flow, you must _____.

A. compound it
B. discount it
C. double it
D. minus it

13. In future value or present value problems, unless stated otherwise, cash flows are assumed to be _____.

A. at the beginning of a time period
B. at the end of a time period
C. in the middle of a time period
D. spread out evenly over a time period

14. If the interest rate is zero, the future value interest factor equals _____.

A. -1.0
B. 0
C. 1.0
D. 2.0

15. In comparing an ordinary annuity and an annuity due, which of the following is true?

A. All things being equal, one would prefer to receive an ordinary annuity compared to an annuity due.
B. The future value of an annuity due is always greater than the future value of an otherwise identical ordinary annuity.
C. The future value of an ordinary annuity is always greater than the future value of an otherwise identical annuity due.
D. The future value of an annuity due is always less than the future value of an otherwise identical ordinary annuity, since one less payment received with an annuity due.

Continued...

16. Which one of the following is generally valued as a perpetuity?

A. Common stock paying increasing dividends.
B. Long-term bond.
C. Preferred stock.
D. Short-term bond.

17. A loan which requires the borrower to pay interest each period and to pay the entire principal at some point in the future is called a(an) _____.

A. amortised loan
B. compound interest loan
C. interest-only loan
D. pure discount loan

18. When comparing loans of equal amounts and equal time periods, you should select the loan that has the lowest _____.

A. annual percentage rate
B. effective annual rate
C. nominal rate
D. stated rate

19. The principal amount of a bond is repaid on _____.

A. coupon date
B. face date
C. issue date
D. maturity date

20. A call provision grants the bond issuer the _____.

A. option to exchange the bonds for equity securities
B. option to repurchase the bonds prior to maturity at a pre-specified price
C. right to automatically extend the bond's maturity date
D. right to repurchase the bonds on the open market prior to maturity

21. Lovely Lass is issuing a 12-year, unsecured bond. Based on this information, you know that this debt can be described as a _____.

A. bearer form bond
B. debenture
C. note
D. registered form bond

Continued...

22. _____ represents additional compensation provided to bondholders to offset the possibility that the bond issuer might not pay the interest and/or principal payments as expected.

A. Default risk premium
B. Inflation premium
C. Interest rate risk premium
D. Liquidity premium

23. _____ has priority in dividend payment and any unpaid dividends can be carried forward. It generally does not carry voting rights.

A. Cumulative preferred stock
B. Cumulative common stock
C. Noncumulative preferred stock
D. Noncumulative common stock

24. Felicia owns 100 shares of stock. Each share entitles her to one vote per open seat on the board of directors. Assume there are 3 open seats in the current election and Felicia casts all 300 of her votes for a single candidate. What is the term used to describe this type of voting?

A. Condensed.
B. Cumulative.
C. Proxy.
D. Straight.

25. Gempak Sdn. Bhd. expects to pay an annual dividend of RM2.00 per share next year. What is the anticipated dividend for Year 4 if the firm increases its dividend by 3 percent annually?

A. RM2.00 x $(1.03)^1$
B. RM2.00 x $(1.03)^2$
C. RM2.00 x $(1.03)^3$
D. RM2.00 x $(1.03)^4$

26. An agent who buys and sells securities from inventory is called a _____.

A. broker
B. commission broker
C. dealer
D. floor trader

Continued...

27. The _____ is the exact amount of time it takes the firm to recover its initial investment.

A. average accounting return
B. net present value
C. payback period
D. profitability index

28. Which one of the following capital budgeting models considers both profitability and time value of money?

A. Average accounting return.
B. Internal rate of return.
C. Net present value.
D. Both A and B are correct.

29. A firm would accept a project with a net present value of zero because _____.

A. the project would maintain the wealth of the firm's owners
B. the project would triple the wealth of the firm's owners
C. the return on the project would be positive
D. the return on the project would be zero

30. Which one of the following analytical methods is based on net income?

A. Average accounting return.
B. Net present value.
C. Payback period.
D. Profitability index.

31. Which of the following period measures the average number of days an inventory is held?

A. Accounts payable period.
B. Accounts receivable period.
C. Discount period.
D. Inventory period.

32. Which one of the following is directly related to increase in a firm's current assets?

A. Carrying costs.
B. Reorder costs.
C. Restocking costs.
D. Shortage costs.

Continued...

33. Which one of the following statements is correct?

A. A firm would prefer a negative cash cycle over a positive cash cycle.
B. Decreasing the inventory period will also decrease the payables period.
C. If a firm decreases its inventory period, its receivable period will also decrease.
D. The longer the cash cycle, the more cash a firm typically has available to invest.

34. Which one of the following is most indicative of a flexible short-term financial policy?

A. Little or no credit sales.
B. Low amounts of marketable securities.
C. Low inventory levels.
D. Relatively high level of liquidity.

35. The financial analyst of Syarikat Purnama reported that the company has inventory turnover rate of 11.8, payables turnover rate of 9.2 and receivables turnover rate of 12.5. What is the length of the company's operating cycle?

A. 12.50 days.
B. 20.46 days.
C. 33.50 days.
D. 60.13 days.

36. Which one of the following represents the need to hold cash simply as financial reserve?

A. Financial motive.
B. Precautionary motive.
C. Speculative motive.
D. Transaction motive.

37. Which one of the following is the element of terms of sale?

A. Credit period.
B. Delivery period.
C. Inventory period.
D. None of the above.

Continued...

38. The reason _____ is offered is to speed up the collection of receivables.

A. absolute discount
B. average discount
C. bulk discount
D. cash discount

39. Seri Murni Company received four cheques today and went to the bank to deposit all of them. Unfortunately, the bank was closed for the day due to system breakdown. How does the bank closure affect the firm's float assuming these four cheques are the only outstanding bank items?

A. Collection float decreased.
B. Collection float increased.
C. Disbursement float decreased.
D. Disbursement float increased.

40. Speedy Bike sells 1,200 bicycles a year, at the price of RM200 each on average. The fixed cost of placing an order with its suppliers is RM90, while the carrying costs are RM10 per unit of bicycle. What is the company's economic order quantity (EOQ)?

A. 104 bicycles.
B. 140 bicycles.
C. 147 bicycles.
D. 174 bicycles.

SECTION B: STRUCTURED QUESTIONS (60 marks)

Instruction: Please write all your answers in the answer booklet provided.

QUESTION 1

(a) You just won a lucky draw worth RM72,000 and must decide how you want to take the payout. You are given the following options.

Option A: RM12,000 a year at the end of each of the next 6 years; or **Option B**: RM60,000 lump sum paid today; or **Option C**: RM72,000 lump sum paid 6 years from today

(i) If the interest rate is 6 percent, find the present value of each option. (6 marks)

(ii) Which is the best option? (1 mark)

Continued...

(b) Find the future value at the end of Year 4 for the following stream of cash flows received at the end of each year, assuming the firm can earn 16 percent on its investments.

Year	1	2	3
Amount (RM)	3,000	6,000	9,000

(4.5 marks)

(c) Kelly just borrowed RM250,000 to build a new bakery. The loan term calls for equal annual payments at the end of each year. The loan is for 15 years at an annual percentage rate (APR) of 7 percent. How much is the first annual payment to be paid?

(3.5 marks)

[TOTAL 15 MARKS]

QUESTION 2

(a) Mimos Corporation just issued bonds with 7.5 coupon rate that will mature on 1 May 2028. The firm pays semi-annual coupons and the bond yields 8 percent return. Assume today's date is 1 May 2018.

(i) Calculate the bond price today. (5 marks)

(ii) What is the current yield? (2.5 marks)

(b) Lilac Corporation is planning to build a new factory in Seremban. To achieve this, the firm needs to raise RM5 million by issuing zero coupon bonds with a par value of RM1,000 that matures in 9 years. The market yield on similar bonds is 5.2 percent. Assume semi-annual compounding.

(i) Calculate the bond price today. (3 marks)

(ii) How many bonds must the company sell to raise RM5 million? (2 marks)

(c) A bond yielded a real rate of return of 4.7 percent for a time period when the inflation rate was 2.2 percent. Calculate the nominal rate.

(2.5 marks)

[TOTAL 15 MARKS]

Continued...

QUESTION 3

(a) SMG Corporation just paid an annual dividend of RM1.30. The company is expected to increase their dividend by 4 percent a year indefinitely due to rapid growth. The required return of this stock is 11 percent.

(i) What is SMG Corporation's stock worth today? (3.5 marks)

(ii) What is the company's stock worth five years from now? (4 marks)

(iii) What will its capital gain be on this stock if the company sells it five years from now?

(1 mark)

(b) Seroja Corporation's dividends are increasing by 3.5 percent annually. What is the amount of the expected dividend in Year 6 if the company is expected to pay an annual dividend of RM4.10 in Year 3?

(3 marks)

(c) Tristan Corporation has been paying an annual dividend of RM3.30 per share for the past five years and the board of directors has just announced that they will be doing so indefinitely. The required return on this stock is 10.5 percent.

(i) What is the stock price worth today? (2.5 marks)

(ii) If you are willing to pay RM30.00 for one share, would you buy Tristan Corporation's stock?

(1 mark)

[TOTAL 15 MARKS]

QUESTION 4

Makoo Company is considering to build a new factory. This project would require an initial investment of RM4,800,000 and will generate annual cash inflows of RM1,000,000 per year for 7 years.

(a) Calculate the project's net present value (NPV) and profitability index (PI) if the required rate of return is:

(i) 9 percent. (6 marks)
(ii) 11 percent. (6 marks)

(b) Calculate the project's payback period. If the acceptable payback period is 4 years, should the company invest in this project?

(3 marks)

[TOTAL 15 MARKS]

End of Page.

Appendix

I. The cash flow identity

Cash flow from assets = Cash flow to creditors (bondholders)
+ Cash flow to stockholders (owners)

II. Cash flow from assets

Cash flow from assets = Operating cash flow
− Net capital spending
− Change in net working capital (NWC)

where

Operating cash flow = Earnings before interest and taxes (EBIT)
+ Depreciation − Taxes

Net capital spending = Ending net fixed assets − Beginning net fixed assets
+ Depreciation

Change in NWC = Ending NWC − Beginning NWC

III. Cash flow to creditors (bondholders)

Cash flow to creditors = Interest paid − Net new borrowing

IV. Cash flow to stockholders (owners)

Cash flow to stockholders = Dividends paid − Net new equity raised

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I. Symbols

PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. Future value of C invested at r percent per period for t periods

$FV_t = C \times (1 + r)^t$

The term $(1 + r)^t$ is called the *future value factor.*

III. Present value of C to be received in t periods at r percent per period

$PV = C/(1 + r)^t$

The term $1/(1 + r)^t$ is called the *present value factor.*

IV. The basic present value equation giving the relationship between present and future value is

$PV = FV_t/(1 + r)^t$

I. Symbols

PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future at time t
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. Future value of C invested per period for t periods at r percent per period

$FV_t = C \times [(1 + r)^t - 1]/r$

A series of identical cash flows is called an annuity, and the term $[(1 + r)^t - 1]/r$ is called the *annuity future value factor.*

III. Present value of C per period for t periods at r percent per period

$PV = C \times \{1 - [1/(1 + r)^t]\}/r$

The term $\{1 - [1/(1 + r)^t]\}/r$ is called the *annuity present value factor.*

IV. Present value of a perpetuity of C per period

$PV = C/r$

A perpetuity has the same cash flow every year forever.